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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------|------------------|
| 09/928,673 | 08/13/2001 | Thomas E. Miller | 328 P 598 | 8170 |
| 7590 | 08/25/2005 | | EXAMINER ENSEY, BRIAN | |
| ANTHONY G. SITKO MARSHALL, GERSTEIN & BORUN 6300 SEARS TOWER 233 SOUTH WACKER DRIVE CHICAGO, IL 60606-6357 | | | ART UNIT 2646 | PAPER NUMBER |
| DATE MAILED: 08/25/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/928,673 | MILLER, THOMAS E. | |
| | Examiner | Art Unit | |
| | Brian Ensey | 2646 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 19 May 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-40 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 1-38 is/are allowed.

6) Claim(s) 39 and 40 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 39 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 39 as amended claims a coil “comprising a first insulated wire winding layer, and a second insulated wire winding layer, and an insulating layer wherein the insulating layer is positioned between the first and second winding layers.” The applicant points to Figure 7 and the specification page 6, lines 28 and 29 and page 7, lines 1 and 2 for support. The specification merely discloses an insulator (120) between “every layer of wire 122, or after every few layers.” The specification nor Figure 7 discloses that the wire is insulated in addition to the

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 39 and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over van Hal in view of Toki U.S. Patent No. 5,858,154.

Regarding claim 39, van Hal discloses a receiver comprising: a pair of spaced permanent magnets; a coil having a tunnel therethrough and a reed armature having a central portion which extends through the coil. Van Hal does not expressly disclose the coil comprises a first insulated wire winding layer, a second insulated wire winding layer, and an insulating layer wherein the insulating layer is positioned between the first and second winding layers. However, Toki teaches insulating flexible sheet material between successive layers of the plurality of winding layers and insulating flexible sheet sections between each individual traced (wire) to vary coil inductance (See Fig. 3 and col. 4, lines 27-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize insulating material between successive layers of the plurality of winding layers to vary coil inductance.

Regarding claim 40, van Hal discloses a receiver comprising: a pair of spaced permanent magnets; a coil having a tunnel therethrough and a reed armature having a central portion which extends through the coil. Van Hal does not expressly disclose the coil comprising a plurality of layers having alternating turns of conductive material and non-conductive material. However, Toki teaches insulating flexible sheet material between successive layers of the plurality of winding layers and insulating flexible sheet sections between each individual traced (wire) to vary coil inductance (See Fig. 3 and col. 4, lines 27-40). This results in a plurality of layers having alternating turns of conductive and non-conductive material. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize insulating material between successive layers of the plurality of winding layers to vary coil inductance.

Applicant's arguments, see remarks page 9 paragraph 2 and page 10, paragraphs 1 and 2, filed 05/16/05, with respect to claims 36-38 have been fully considered and are persuasive. The rejection of claims 36-38 has been withdrawn.

Applicant's arguments filed 5/16/05 with regards to claims 39 and 40 have been fully considered but they are not persuasive.

Regarding claims 39 and 40, Toki (US 5858154) teaches individual insulating layers of flexible sheets between layers of conductive sheets where conductive foil patterns (wires) are further separated by an insulating portion of the flexible sheet to prevent short circuiting of adjacent traces as in any coil configuration. Toki teaches these multilayer coils may be used as voice coils in speakers or coils used for communication systems. It would have been obvious to one of ordinary skill in the art at the time of the invention to use these coils in the device of Van Hal to provide reduced size and to control specific coil inductance (See col. 1, lines 50-61).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(571) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to: Customer Service Window, Randolph Building, 401 Dulany Street, Arlington, VA 22314

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BKE
August 15, 2005



SUHAN NI
PRIMARY EXAMINER